

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all previous versions and listings of claims in this application.

Claim Listing:

1. (Cancelled).

2. (Currently Amended) A computer-implemented method for calculating a subscriber's account balance in a telecommunications system where at least two different types of vouchers having the same type of a credit value can be used for making deposits in the account, which vouchers may be bought, the types of the vouchers differing from each other at least so that a certain amount of a calling time has different prices in different types of the vouchers, the method comprising:

defining, to a memory, at least two different ways of updating the account balance for the same type of a credit value, wherein a first way to update comprises calculating, by a processor coupled to the memory, the account balance by adding a credit value of a new voucher to the credit in the account, and the second way to update comprises calculating the account balance by setting the account balance to be the credit value of the new voucher;

maintaining information in a database, separate from account balance information, said information indicating the type of a last used voucher of the subscriber;

receiving a deposit identifying a new voucher which the subscriber is going to use to update his/her credit;

determining, by the processor, the type of the new voucher;

determining, by the processor, the type of the last used voucher of the subscriber;

comparing, by the processor, the type of the new voucher with the type of the last used voucher of the subscriber; and

if said vouchers are of the same type, using the processor to calculate the first way to update the account balance; and

if said vouchers are of a different type of vouchers having the same type of a credit value, using the processor to calculate the second way to update the account balance.

3. (Currently Amended) A computer-implemented method for calculating a subscriber's account balance in a telecommunications system where at least two different types of vouchers having the same type of a credit value can be used for making deposits in the account, which vouchers may be bought, the types of the vouchers differing from each other at least so that a certain amount of a calling time has different prices in different types of the vouchers; the method comprising:

defining, to a memory, at least two different ways of updating the account balance for the same type of a credit value, wherein the first way to update comprises calculating, by a processor coupled to the memory, the account balance by adding a value of a new voucher to the credit in the account, and the second way to update comprises determining a factor, other than one, multiplying the credit in the account with the factor, adding the result of said multiplication to the credit value of the new voucher, and setting the account balance to be the result of said addition;

maintaining information in a database, separate from account balance information, said information indicating the type of a last used voucher of the subscriber;

receiving a deposit identifying a new voucher which the subscriber is going to use to update his/her credit;

determining, by the processor, the type of the new voucher;

determining, by the processor, the type of the last used voucher of the subscriber;

comparing, by the processor, the type of the new voucher with the type of the last used voucher of the subscriber; and

if said vouchers are of the same type, using the processor to calculate the first way to update the account balance; and;

if said vouchers are of a different type of vouchers having the same type of a credit value, using the processor to calculate the second way to update the account balance.

4. (Currently Amended) The method of claim 3, wherein said factor is determined by the processor on the basis of the types of the last used voucher and the new voucher.

5. (Currently Amended) The method of claim 3 further comprising:

asking the subscriber for a permission to update the credit, if the vouchers are of a different type having the same type of a credit value; and

updating, by the processor, the credit only if the permission is received from the subscriber.

6. (Previously Presented) The method of claim 3 wherein the types of the vouchers are determined on the basis of their identification numbers.

7. (Previously Presented) The method of claim 2, wherein the telecommunications system is a mobile telecommunications system.

8. (Currently Amended) ~~An arrangement for updating a subscriber's account balance in a~~ A telecommunications system in which ~~the a~~ subscriber can pre-pay for the subscriber's calls by making deposits in the subscriber's account using at least two different types of vouchers having the same type of a credit value, wherein said vouchers may be bought, the types of the vouchers differing from each other at least so that a certain amount of a calling time has different prices in different types of the vouchers, the telecommunications system comprising:

a database configured to contain voucher-specific information and subscriber-specific information; and

a network element connectable to the database and comprising a memory, a processor,
and an interface for user interaction, the network element arrangement being configured to:

determine obtain, from the database, and in response to the subscriber making a deposit,
voucher-specific information and a subscriber's subscriber-specific information;

determine, by using the obtained information, a type of a last used voucher of the
subscriber and the type of a new voucher which the subscriber is going to use to update the
subscriber's account balance;

compare the type of the last used voucher with the type of the new voucher;

apply a first method stored in the memory and executed by the processor to update the
account balance in a first way if the last used voucher and the new voucher are the same type,
wherein the first way comprises calculating the account balance by adding a credit value of a
new voucher to the credit in the account;

detect a change of voucher if the last used voucher and the new voucher are of different
type of vouchers having the same type of credit value; and

in response to said detection, update the account balance in a second way different from
the first way, wherein the second way comprises calculating the account balance by setting the
account balance to be the credit value of the new voucher.

9. (Currently amended) The ~~arrangement~~ telecommunications system of claim 8,
wherein the ~~arrangement~~ network element is further configured, in response to said detection, to
ask the subscriber for a permission to update the account balance and to update the account
balance only in response to the permission.

10. (Cancelled).

11. (Currently amended) The ~~arrangement~~ telecommunications system of claim 9,
wherein the ~~arrangement~~ comprises network element is an Intelligent Peripheral of an Intelligent
Network, said Intelligent Peripheral comprising an Interactive Voice Response service through
which the account balances are updated.

12. (Currently amended) A network element for a telecommunications system where a subscriber of the system can pre-pay for the subscriber's calls by making deposits in the subscriber's account using at least two different types of vouchers having the same type of a credit value, which vouchers may be bought, the types of the vouchers differing from each other at least so that a certain amount of a calling time has different prices in different types of the vouchers, the network element comprising:

a memory in which the account balance, and information indicating, subscriber-specifically, a type of a voucher last used by the subscriber are maintained, said information relating to the type of voucher last used being maintained separate from the account balance;

a first mechanism-processor coupled to the memory and configured to:

determine the type of a voucher last used by the subscriber;

a second mechanism configured to determine the type of the new voucher which the subscriber is going to use to update the subscriber's account balance; and

a third mechanism configured to:

compare the type of the voucher last used by the subscriber with the type of the new voucher,

calculate the account balance by adding a credit value of a new voucher to the credit in the account if said vouchers are of the same type, and

calculate the account balance by setting the account balance to be the credit value of the new voucher if said vouchers are of a different type of vouchers having the same type of a credit value.

13. (Currently amended) The network element of claim 12, wherein the further comprising an interface for user interaction coupled to the processor, wherein the third mechanism-processor is further configured to ask the subscriber, via the interface, for a permission to update the account balance in response to said vouchers being of a different type, and to update the account balance only in response to a permission received from the subscriber.

14. (Currently amended) A network element for a telecommunications system where a subscriber of the system can pre-pay for subscriber's calls by making deposits in the subscriber's account using at least two different types of vouchers having the same type of a credit value, which vouchers may be bought, the types of the vouchers differing from each other at least so that a certain amount of a calling time has different prices in different types of the vouchers, the network element comprising:

access to a memory, where the account balance and information indicating subscriber-specifically a type of a voucher last used by the subscriber are maintained, said information relating to the type of voucher last used being maintained separate from the account balance;

~~a first mechanism-processor coupled to the memory and configured to:~~

determine the type of the voucher last used by the subscriber;

~~a second mechanism configured to determine the type of a new voucher which the subscriber is going to use to update the subscriber's account balance; and~~

~~a third mechanism configured to:~~

compare the type of the voucher last used by the subscriber with the type of the new voucher;

calculate the account balance by adding a credit value of a new voucher to the credit in the account if said vouchers are of the same type; and

calculate the account balance by determining a factor, other than one, by multiplying the subscriber's current account balance with said factor, by adding the result of said multiplication to the credit value of the second voucher, and by setting the account balance to be the result of said addition if said vouchers are of a different type of vouchers having the same type of a credit value.

Claims 15-16: (Cancelled).

17. (Currently amended) The network element of claim 14, wherein the ~~third mechanism~~ network element further comprises an interface via which the processor is further configured to ask the subscriber for a permission to update the account balance in response to said vouchers being of a different type, and the processor is configured to update the account balance only in response to a permission received from the subscriber.

Claims 18-19: (Cancelled).

20. (Currently Amended) ~~An arrangement for updating a subscriber's account balance in a~~ A telecommunications system ~~where the~~ in which a subscriber can ~~pre-pay pre-pays~~ for subscriber's calls by making deposits in a subscriber's account using at least two different types of vouchers having the same type of a credit value, and in which vouchers may be bought, the types of the vouchers differing from each other at least so that a certain amount of a calling time has different prices in different types of the vouchers, the arrangement being configured to telecommunications system comprising:

a database configured to contain voucher-specific information and subscriber-specific information; and

a network element coupled to the database and comprising a memory, a processor, and an interface for user interaction, the network element being configured to:

determine obtain, in response to the subscriber making a deposit, from the database, voucher-specific information and the subscriber's subscriber-specific information;

determine, by using the obtained information, a type of a last used voucher of the subscriber and the type of a new voucher which the subscriber is going to use to update the subscriber's account balance;

compare the type of the lased used voucher with the type of the new voucher;

apply a first method to update the account balance if the last used voucher and the new voucher are of the same type, the first method comprising calculating the account balance by adding a credit value of a new voucher to the credit in the account;

detect a change of voucher if the last used voucher and the new voucher are of different type of vouchers having the same type of a credit value; and

in response to said detection, to apply a second method to update the account balance, the second method comprising determining a factor, other than one, multiplying the credit in the account with the factor, adding the result of said multiplication to the credit value of the new voucher, and setting the account balance to be the result of said addition.

21. (New) The network element of claim 12, wherein the network element is an Intelligent Peripheral of an Intelligent Network, said Intelligent Peripheral comprising an Interactive Voice Response service through which the account balances are updated.

22. (New) The arrangement of claim 13, wherein the network element is an Intelligent Peripheral of an Intelligent Network, said Intelligent Peripheral comprising an Interactive Voice Response service through which the account balances are updated.